Environmental Public Health Tracking

Issue 2, Winter 2004

Our vision is to protect communities from adverse health effects through the integration of public health and environmental information.

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Dr. Spence tests a young volunteer during this summer's Lewistown PCB investigation.

PCB Exposure Investigation in Lewistown, MT

Dr. Michael R. Spence, MPH, EPHT Principal Investigator

The EPHT team was recently involved in a polychlorinated biphenyl (PCB) exposure investigation in Lewistown. In June 2004 a group of citizens concerned about PCB contamination in fish in Big Spring Creek requested Dr. Spence to come to Lewistown and discuss the potential human health effects of PCBs. During those discussions the cost of testing for PCBs was

raised and the group asked Dr. Spence to see if he could find a way for human testing for PCBs to be done less expensively. In August, while in Atlanta for another reason, Dr. Spence met with individuals in the Epidemiological Investigation Branch (EIB) of the Agency for Toxic Substances and Disease Registry (ATSDR). He presented the Lewistown scenario and requested

assistance. Dan Strausbaugh, the Montana representative for ATSDR and a member of the EPHT Advisory Council, participated in the meeting via telephone.

n August 16 and 17 the four staff members of the EPHT program along with Elton Mosher of the Epidemiological Surveillance Section in the Montana Department of Public Health and Human Services (DPHHS), Dan Strausbaugh of ATSDR, and two staff members from the EIB in Atlanta, Clem Welsh and Ken Orwell, evaluated 109 volunteers in Lewistown for PCBs. Individuals undergoing the investigation gave a history of living on, recreating in, drinking water from, or

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For more information, as well as links to related resources, visit our website at http://www.dphhs.state.mt.us/epht.

PCB Exposure Investigation in Lewistown, MT

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eating fish from Big Spring Creek. After completing an e p i d e m i o l o g i c a l questionnaire to determine potential pathways of exposure, a venous blood sample was obtained for blood lipid and PCB measurements. The levels of PCBs that were found in the volunteers were similar to levels found in a randomized national population, and it is felt that there is not a significant PCB problem in the population evaluated.

t is important to note that one of the spin-offs of PCB measurements is the obtainment of blood lipid

levels. The blood lipid levels of total cholesterol and total triglycerides were elevated in a significant proportion of the population. Although the volunteers were not instructed to fast, the high levels of blood lipids far exceeded what would be anticipated even in individuals that had eaten. In essence, it is probably fair to say that the individuals in Lewistown that were evaluated are a far higher risk for heart attacks and strokes then they are for any adverse health outcome related to PCB exposure.













County Commissioners Respond to Survey

In a survey recently conducted by Dr. Wade Hill of the MSU College of Nursing, County Commissioners responding to the survey perceived that they can influence the environmental health of Montanans. Nearly 70% of respondents agreed or strongly agreed with the statement, "County Commissioners can play a key role in helping to prevent environmentally related illnesses." Likewise, 97% of respondents stated that County Commissioners should be aware of specific environmental hazards in their communities, and 80% felt that it is important to support healthcare workers to intervene in cases where environmental hazards/exposures exist. A full report of survey findings will be available soon on the EPHT website. http://www.dphhs.state.mt.us/epht.

Interagency Children's Environmental Health Network

he Montana Children's Environmental Health (CEH) Network was formed in November 2003. This working group meets monthly and consists of representatives from the Montana EPA office. MT DEQ, ATSDR, and MT DPHHS. The Network has developed a strategic plan to address issues related to children's health and the environment. Collaborative efforts have brought speakers such as Dr. Katherine Shea of Chapel Hill and Dr. Mark Anderson of the Rocky Mountain Pediatric Environmental Health

Specialty Unit to Montana who, presented to public health professionals from across the state at this September's MPHA conference.

The CEH group was asked to present at the EPA Region 8 Summit on Children's Environmental Health in October, where Montana was noted as the first state in this region that has developed an interagency CEH network. Currently, CEH is working to support Clean School Buses and School Science Lab Clean-Up projects.

Three Contractors Selected for 2005 Community EH Assessment Work

Christine Deveny, EPHT Technical Facilitator

his fall EPHT contracted with the Missoula County Health Department, Northern Cheyenne Tribe, and Rocky Boy Tribes to conduct countyand reservation-wide Community Environmental Health (EH) Assessments during 2005. EPHT is requiring each contractor to conduct a survey and then use additional assessment methods best suited to their communities to identify environmental health concerns from a broad crosssection of their population. They will also establish Community EH Assessment Teams to help plan and implement their work. Tribal and County Health Boards will

be involved in setting priorities for future action and establishing specific action steps to address some of the identified concerns. Each contractor will document their assessment process, findings, and recommendations in a final report due to EPHT in September.

Several representatives from the three sites attended a one-and-a-half day orientation and training session in Helena in early December. Among other topics, they learned about EPHT project objectives and received specific hands-on

training on assessment methods, team building, meeting facilitation, and work plan development. Along with providing on-going technical assistance to the contractors, EPHT has planned a follow-up training event for them on February 3rd and 4th.

include the summary results from those 11 assessments.
The results will also be posted on the EPHT website at: www.dphhs.state.mt/epht

Assessments in 2004. The

next EPHT newsletter will

he new contractors will benefit greatly from the results and lessons learned from the eleven county and tribal contractors that completed EH



Measures of Environmental Health in Montana

Christine Korhonen, MPH, EPHT Epidemiologist

long-term goal of **Environmental Public** Health Tracking is to help protect health through a better understanding of the role of the environment. In order to learn more about the state of the environment as it relates to health in Montana, we've described currently available indicators of environmental quality and human health in our publication "Measures of Environmental Health in Montana". Included information comes from Montana's Department of Environmental Quality (DEQ),

the Environmental Protection Agency (EPA), DPHHS disease registries, and the Behavioral Risk Factor Surveillance Survey (BRFSS).

The health and environmental measures described in the booklet fall into several groups. On the environmental side are indoor and outdoor air quality, drinking water quality, and information on chemical hazards such as lead and asbestos. Health measures

include cancers, birth defects, and asthma. Many of the measures have national Healthy People 2010 goals attached. For example, the Healthy People 2010 goal for outdoor air quality is to eliminate the population's exposure to air not meeting EPA standards. In 2004, 50% of Montana's population lived in air pollution non-attainment areas. Over time, we can describe progress made in air quality and the other measures described, and find those areas where the most work is needed.

he "Measures of Environmental Health in Montana" publication is in its final revisions and will be available for EPHT's strategic planning session in February. It will be posted on the EPHT website and bound copies will be available from our office.





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Upcoming Events & Activities

- CEHA Training, February 3 & 4, Wingate Inn, Helena.
- EPHT Advisory Group Strategic Planning Session, February 24 & 25, Great Northern Hotel, Helena.
- National EPHT
 Partners
 Conference, April
 20-22, Atlanta, GA.

New Directors at DPHHS & DEQ

mong other changes in state government, new department directors have been appointed for both DPHHS and DEQ. Dr. Robert Wynia will serve as Director of the Department of Public Health and Human Services. Dr. Wynia practices internal medicine in Great Falls and also works as a Senior Airman Medical Examiner for Federal Aviation Administration. Richard Opper has been named as the new director of DEQ. Mr. Opper served as the executive director of the Missouri River Basin Association in Lewistown. EPHT had the opportunity to

work with Mr. Opper during the Lewistown PCB investigation and looks forward to working with him as well as Dr. Wynia in the future!





San Francisco National EPHT Partners Conference, October 12-15

EPHT Contractors presented posters at the October EPHT National Partners Conference in San Francisco. Clockwise: Dr. Wade Hill of MSU Bozeman College of Nursing; Chris Deveny, EPHT Technical Facilitator; Diana Vanek and Curtis Noonan of UM CEHS.

